

REMARKS

Claims 1, 3-17, and 19-36 are currently pending in the application. Claims 1, 17-33 and 34 have been rejected and Claims 3-16, 19-31, 35 and 36 have been objected to¹.

Claims 1, 17, 33 and 34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,025,818 ("Okano") in view of U.S. Patent No. 6,310,588 (Kawahara et al., hereinafter "Kawahara"). This rejection is respectfully traversed.

With respect to Claim 33, the Office states that Okano discloses an apparatus for driving a display device having all of the elements of Claim 33 except that Okano fails to disclose a gamma correction unit which is disclosed in Kawahara. In response, the Applicants have amended Claim 33 to make it clear that the false contour elimination unit converts subfields by changing a gray level of the corrected digital image signal depending on the degree of transition in the gray level between pixels in the current frame and corresponding pixels in the previous frame by analyzing the gray level transition between a group of pixels surrounding each current frame pixel and a corresponding group of pixels in the previous frame, which are spatially aligned with the group of pixels in the current frame. Support for this amendment can be found for instance in the specification of the present application at the bottom of page 12 wherein the present specification discloses the exemplary use of a 3 by 3 block surrounding the pixel of the current frame to eliminate noise in the input image.

¹ In light of the prosecution history, it is assumed that claims 21-23 were to be included, and claim 32 was to be omitted from the list of claims having allowable subject matter.

This is not disclosed by Okano.

The Office further states that the false contour elimination unit shown as element 7 in Figure 1 is disclosed in Okano at column 2, lines 65, through column 3, line 5 and at column 4, line 64 through column 5, line 9. Okano, however, discloses making the determination on a pixel by pixel basis as disclosed in column 2, lines 65-67, where it states "The method comprising steps of comparing a present pixel data of a pixel with a prior pixel data of a same pixel, detecting whether there is a change between a data of a highest luminance and a data of a luminance of a one digit lower in the comparison . . ." Therefore, Okano discloses determining the difference on a pixel by pixel basis, not based upon a degree of gray-level transition between a group of pixels surrounding each current frame pixel and a group of pixels surrounding a corresponding previous frame pixel in the image signal. Further, Okano discloses a method whereby only certain differences are being detected, namely the cases wherein there is a change between the data of a highest luminance and the data of a luminance of a one digit lower.

Because all elements of amended Claim 33 is not disclosed in Okano, Kawahara or any combination thereof, the Applicants respectfully submit that the amendment renders Claim 33 distinguishable over the cited prior art. In addition, Claim 34, which is dependent upon Claim 33 should be distinguished from the prior art for the same reason.

With respect to Claims 1 and 17, the Office states that the limitations of independent Claim 1 are the same as the limitations of Claim 34. With respect to Claim 1, the Applicants have amended Claim 1 in a manner similar to amended Claim 33, specifying that the first gray level changing unit calculates the difference in

the grade level between pixels in the current frame and corresponding pixels in the previous frame by utilizing a block of pixels of a predetermined size surrounding the pixel in question. Again, this is disclosed in the specification at the bottom of page 12. The same change has been made to Claim 17 and, as a result, the Applicants respectfully submit that Claims 1 and 17 are distinguishable from the prior art which does not disclose the use of a group of pixels surrounding each pixel of the present frame to determine the degree of change in the gray level between the previous frame and the current frame.

The Applicants appreciate the office's acknowledgement that Claims 3-16, 19, 20, 22, 24-32, 35 and 36 would be allowable if rewritten in independent form. However, the Applicants decline to do so at this time pending the Office's response to the Applicants' amendments and remarks above with respect to Claims 1, 17, 33 and 34.

Conclusion

The Applicants have provided amendments to Claims 1, 17 and 33 and have provided reasoned arguments distinguishing those claims from the cited prior art and, as a result, those claims are believed to be patentable in light thereof and therefore, the Applicants respectfully request withdrawal of the rejection of those claims under § 103(a).

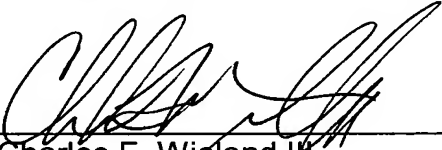
It is believed that this Response and Amendment requires no fee. However, if an additional fee is required for any reason, please charge Deposit Account No. 02-4800 the necessary amount. Should the Examiner have any questions regarding these amendments or arguments, the Applicant requests that the Examiner contact the Applicant's attorney, listed below.

Respectfully submitted,

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